

NEVADA DEPARTMENT OF CORRECTIONS	SERIES 400 INSTITUTIONAL MANAGEMENT	SUPERCEDES: AR 443 01/20/03
ADMINISTRATIVE REGULATIONS MANUAL	ADMINISTRATIVE REGULATION 443 HAZARDOUS COMMUNICATIONS AND CONTROL, USE OF TOXIC, FLAMMABLE, AND CAUSTIC SUBSTANCES TEMP	EFFECTIVE DATE 04/05/04

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MANDATORY REVIEW DATE 01/20/05

PURPOSE

To identify the hazards associated with chemicals used in the workplace.

To provide a means to transmit information regarding hazardous substances that affected employees and inmates.

To set forth guidelines and establish procedures governing the handling, storage, control and use of flammable, toxic, caustic and dangerous materials that presents a hazard to employees and inmates.

AUTHORITY

Title 29, Code of Federal Regulations, Section 1910.1200

NRS 209.131

NRS 618.353

NRS 618.375

NRS 618.383

RESPONSIBILITY

All Department employees and inmates using flammable, toxic, caustic and dangerous materials are responsible to follow all prescribed safety precautions, wear personal protective equipment when necessary, and report all hazards or spills to the proper authority. **(3-4203)**

APPLICABILITY

This regulation applies to all Department employees and inmates.

DEFINITIONS

CAUSTIC MATERIAL – A substance capable of destroying or causing a destruction of other material by chemical reaction. (See OSHA Table C, attached.)

COMBUSTIBLE LIQUID – A substance with a flash point at or above 100 degrees Fahrenheit as classified in OSHA, Table C.

DANGEROUS MATERIALS – Any materials or substances that poses a hazard to employees or employees.

FLAMMABLE LIQUID – A fluid substance with a flash point below 100 degrees Fahrenheit (37.8 degrees Centigrade). Classified by flash point as a Class I Liquid (See OSHA Table C).

FLAMMABLE MATERIALS – Are any liquid or aerosol material that is required to be labeled Flammable or Combustible under the Federal Hazardous Substances Labeling Act that must be stored, used according to label recommendations and in a way that does not endanger life or property.

FLASH POINT – The minimum temperature at which a liquid will give off sufficient vapors to form an ignitable mixture with the air near the surface of the liquid (or in the vessel used).

HAZARDOUS CHEMICALS – All chemicals that pose a hazard to the health and safety of employees and inmates.

HAZARDOUS COMMUNICATIONS – The means of recognition and identification and dissemination of information to employees and inmates regarding hazardous chemicals and materials that could be harmful.

MATERIAL SAFETY DATA SHEETS (MSDS) – Written or printed material concerning a hazardous material containing written information on hazardous materials.

OSHA – The Occupational Safety and Health Administration, a Federal agency tasked with the regulatory responsibilities regarding the identification, labeling, use, storage and disposal safety requirements regarding hazardous materials and substances.

POISONOUS SUBSTANCES OR CHEMICALS – Are those that pose a very high (Class I) caustic hazard due to their toxicity.

TOXIC MATERIAL – A poisonous substance that, through chemical reaction or mixture, can produce possible injury or harm to the body by entry through the skin, digestive tract, or respiratory tract. The toxicity is dependent on the quantity absorbed and the rate, method, and site of absorption. (See OSHA Table C.)

PROCEDURES

443.01 GENERAL GUIDELINES

1.1 All flammable, caustic, and toxic substances should be issued (i.e., drawn from supply points to canisters or dispensed) only under the supervision of authorized staff. These authorized staff must have received annual safety training in flammable, caustic and toxic substances (i.e. maintenance personnel, laundry supervisor, etc.). **(3-4203)**

1.2 All such substances will be issued only in the amounts necessary for one day's need. **(3-4203)**

1.3 All inmates using such substances should be under direct visual and constant supervision by a qualified employee with a written authorization by the Warden/Manager. **(3-4203)**

1.4 All such substances must be accounted for and inventoried before, during, and after their use. **(3-4203)**

- Staff must maintain a log of all substances.

1.5 All substances should be properly labeled or warning signs posted regarding hazards in the workplace.

1.5.1 All information must include the suitable precautions, the symptoms and emergency treatment in case of exposure to hazards.

1.6 Employees and inmates will be trained and provided with the proper personal protection equipment and/or devices required by the manufacturer prior to the use of these substances.

443.02 SPECIFIC GUIDELINES FOR STORAGE, USE, AND DISPOSAL

1.1 Storage

1.1.1 Lighting fixtures and electrical equipment in flammable liquid storage rooms must conform to the National Electrical Code requirements for installation in hazardous locations.

1.1.2 Storage rooms must meet the following specifications:

- Be of fire-resistant construction and properly secured;
- Have self-closing fire doors at all openings;
- Have either a four-inch sill or a four-inch depressed floor (inside storage rooms only); and
- Have a ventilation system—either mechanical or gravity flow within twelve inches of the floor—that provides at least six air changes per hour in the room.

1.1.3 Each storage cabinet must be:

- Properly constructed and securely locked;
- Conspicuously labeled “Flammable—Keep Fire Away”; and
- Used to store no more than sixty gallons of Class I or Class II liquids or 120 gallons of Class III liquids.

1.1.4 Storage rooms and cabinets must be properly secured and supervised by an authorized staff member any time they are in use. Doors and cabinets should be placed so that they do not obstruct access to exits, stairways, and other areas normally used for evacuation in the event of fire or other emergency.

1.1.5 All portable containers for flammable and combustible liquids other than the original shipping containers must be approved safety cans listed or labeled by a nationally recognized test laboratory. Containers will bear legible labels identifying the contents.

1.1.6 All excess liquids should remain in their original container in the storage room or cabinet. All containers will be tightly closed when not in use.

1.1.7 Gasoline pumps will be located outside the main compound. Pumps are to be locked when not in use and accountability of gasoline maintained.

- Staff will supervise movement of gasoline into an institution for use in small engines;

- Gasoline propelled lawn mowers and other small engines should be stored in a secure place when not actually in use;
- Supervisors of small engine repair shops should issue gasoline needed to operate engines only during periods of instruction of repair; and
- Surplus gasoline will be carefully controlled and accountability maintained at all times.

1.1.8 The quantity of flammable or combustible liquid that may be located outside of an inside storage room or storage cabinet will not exceed 120 gallons, or 600 gallon if all the liquid is in a single portable tank.

1.1.9 Outside storage areas will be surrounded with curbs or dikes at least six inches high. The area will be protected against tampering or trespassing where necessary and should be kept free of weeds, debris and other combustible materials not necessary to the storage.

1.2 Use

1.2.1 The use of any flammable or combustible liquid must conform with the provisions and precautions listed in the manufacturer's Material Safety Data Sheet.

1.2.2 Only a properly trained staff member can dispense flammable and combustible liquids. The only acceptable methods for drawing from or transferring these liquids into containers inside a building are (1) through a closed piping system; (2) from safety cans; (3) by a device drawing through the top; or (4) by gravity through an approved self-closing system. An approved grounding and bonding system must be used when liquids are dispensed from drums.

1.2.3 Only combustible liquids can be used for cleaning. Such operations must be performed in an approved part cleaner or dip-tank fitted with a fusible link lid with a 160-degree F melting-temperature link. Under no circumstances can flammable liquids be used for cleaning.

1.2.4 Cleaning of metal parts (i.e., carburetor parts, etc.) will be accomplished with an approved cleaning agitator not in buckets.

1.2.4.1 Approved parts cleaner cabinets (with fusible linked lids) will be used.

1.3 Disposal

1.3.1 Excess flammable or combustible liquids must be disposed of properly according to MSDS for each substance.

1.4 Spills

1.4.1 Information on the proper course of action for chemical spills is contained in the Material Safety Data Sheet for each substance.

1.5 Toxic and Caustic Substances

1.5.1 Storage

1.5.1.1 All toxic and caustic materials are to be stored in their original containers in a secure area in each department. The manufacturer's label must be kept intact on the container.

1.5.2 Use

1.5.2.1 Only a staff member can draw toxic and caustic substances. The Material Safety Data Sheet for each substance details the necessary provisions and precautions for its use.

1.5.2.2 Unused portions are to be returned to the original container in the storage area or, if appropriate, stored in the storage area in a suitable clearly labeled container.

1.5.3 Disposal

1.5.3.1 See disposal guidelines for Flammable and Combustible Liquids above.

1.5.4 Spills

1.5.4.1 See spills guidelines for Flammable and Combustible Liquids above.

- Employees will be trained and provided with the suitable precautions, the symptoms and emergency treatment in case of exposure to hazards.

1.6 Poisonous Substances

1.6.1 Examples include methyl alcohol, sulfuric acid, muriatic acid, caustic soda, and tannic acid.

1.6.2 There are special precautions on the control and use of methyl alcohol (also known As wood alcohol or methanol), which is a flammable, poisonous liquid commonly used in industrial applications (e.g., shellac thinner, paint solvent, duplicating fluid, solvents for leather cements and dyes, flushing fluid for hydraulic brake systems).

1.6.3 Drinking methyl alcohol can cause death or permanent blindness.

1.6.4 Staff must directly supervise the use of any product containing methyl alcohol. **(3-4203)**

1.6.5 Products containing methyl alcohol in a diluted state, such as shoe dye, may be issued to inmates or residents, but only in the smallest workable quantities.

1.6.6 Immediate medical attention is imperative whenever methyl alcohol poisoning is suspected.

1.6.7 All poisonous and other toxic substances will be stored inside securely constructed locked containers or inside locked rooms available only to employees as designated in writing by the Warden/Manager.

1.7 Other Toxic Substances

1.7.1 Permanent antifreeze containing ethylene glycol should be stored in a locked area and dispensed only by authorized staff. **(3-4203)**

1.7.2 Typewriter cleaner containing carbon tetrachloride or trichloroethane will be dispensed in small quantities and used under direct supervisions. **(3-4203)**

1.7.3 The use of cleaning fluid containing carbon tetrachloride or tetrachloride or Trichloroethylene must be strictly controlled. **(3-4203)**

1.7.4 Glues of all types may contain hazardous chemicals and should receive close attention at every stage of handling. Nontoxic products will be used when possible. Toxic glues must be stored under lock and used under close supervision. **(3-4203)**

1.7.5 The use of dyes and cements for leather requires close supervision. Nonflammable types should be used whenever possible. **(3-4203)**

1.7.6 Ethyl alcohol, isopropyl alcohol, and other antiseptic products will be stored and used only in the medical department. The use of such chemicals must be closely supervised. Whenever possible, such chemicals should be diluted and issued only in small quantities so as to prevent any injurious or lethal accumulation. **(3-4203)**

1.7.7 Pesticides contain many types of poisons. The staff member with responsibility for the facility's safety program should be responsible for purchasing, storing, and dispensing any pesticide. All pesticides shall be securely stored. **(3-4203)**

1.4.7.1 Only chemicals approved by the Environmental Protection Agency should be used. DDT and 1080 (sodium fluoracetate) are among those chemicals absolutely prohibited.

1.7.8 Herbicides must be stored under lock. The staff member responsible for herbicides must have a current state license as a Certified Private Applicator. Proper clothing and protective gear must be used when applying herbicides.

1.7.9 Lye's must be used only in dye solutions and only under the direct supervision of staff. **(3-4203)**

443.03 INVENTORIES, FILES, AND MASTER INDEX

1.1 Inventories

1.1.1 Constant inventories will be maintained for all flammable, toxic, and caustic substances used and stored in each Department.

- Employees should draw these substances only when so authorized by a Department supervisor;
- The issuing officer should record the time, date, amount, and name of the person receiving the substance; and
- Each workstation will maintain an inventory of all types and amounts of substances in their respective areas.

1.1.2 A record card should be maintained for each such substance to accurately reflect acquisitions, disbursements, and the amounts on hand.

1.1.3 Every effort should be made to replace hazardous substances with a substance less likely to be as hazardous.

1.1.4 A copy of the inventory will be forwarded to the Safety and Health Supervisor and the Associate Warden Operations/Facility Manager on the first day of each new quarter beginning January 1st of each year.

1.2 Department Files

1.2.1 Each Division within the Department using any flammable, toxic, or caustic substance will maintain a file of the manufacturer's Material Safety Data Sheet (MSDS) for each substance and make these MSDS's available to the employees during their shifts.

1.2.1.1 All product suppliers should provide MSDS's for each of their products and each product must include labels and warnings and the name and address of the supplier or responsible party prior to the delivery of the product.

1.2.1.2 No employee will remove or deface the labels or warnings of any product.

1.2.1.3 All labels and warnings must be legible and prominently displayed on the containers; and

1.2.1.4 All products, which carry a MSDS, will be handled in accordance with the specifications of the sheet.

1.2.1.5 The Department file should be upgraded at least annually.

1.2.1.6 The Department file should also contain a list of all areas where these substances are stored, along with a plant diagram and legend.

1.2.1.7 A copy of all information in the Department file, including the Material Safety Data Sheets, is to be supplied to the staff member responsible for the institution/facility's safety program, the Safety and Health Supervisor, and the medical division at the institution/facility.

1.3 Master Index

1.3.1 The staff member responsible for the institution/facility's safety program will compile a master index of all flammable, caustic, and toxic substances in the institution/facility, including their locations and Material Safety Data Sheets (MSDS).

1.3.2 This information will be kept in the safety office (or comparable location) and a copy shall be forwarded to the Compliance Supervisor who will supply a copy to the local fire department upon request within the proper jurisdiction.

1.3.3 The master index will also contain an up-to-date list of emergency phone numbers (e.g., local fire department, local poison control centers.)

443.04 TRAINING/INSPECTIONS

1.1 The Compliance Supervisor will prepare and make available to all employees and inmates written training program on the proper storage, control and use of all hazardous substances.

1.1.1 Employees that routinely come into contact with certain hazardous substances will receive more in depth training in those particular areas.

1.1.2 While ensuring consistency with safety and security concerns, inmates will receive proper hazardous material and substance training.

1.2 Documentation of such training will be recorded by the supervisor or individual(s) conducting the training and filed with the Department's Compliance Supervisor. The supervisor will ensure a copy of the documentation will be forwarded for retention to the Department's regional Employee Development Office.

1.3 All Department training programs will be reviewed, at a minimum, annually by the Compliance Supervisor or designee in conjunction with the Department's Employee Development Manager or designee to ensure continued up-date and compliance with all applicable laws. This review will be documented and filed with the Compliance Supervisor.

1.4 Administrators, Wardens and Managers will ensure that all employees who utilize these

substances are properly trained in their use and are familiar with the emergency care procedures in the event of an accident.

1.4.1 Supervisors will ensure that the substances are handled and stored in accordance with the manufacturer's recommendations.

1.4.2 Supervisors will ensure that all persons working with or exposed to these materials are made aware of the warning indications and to the possible health risks involved with the product.

1.5 The Compliance Supervisor will conduct inspections at least quarterly at institutions/facilities as deemed necessary and report findings of non-compliance to the Director, Warden and Inspector General.

1.5.1 The staff member responsible for the safety program at the institution/facility may be requested to conduct inspections by the Compliance Supervisor as deemed necessary.

REFERENCES

ACA Standard 3-4203

ATTACHMENTS

OSHA Table C

Jackie Crawford, Director

Date

CONFIDENTIAL

Yes

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No

THIS PROCEDURE SUPERSEDES ALL PRIOR WRITTEN PROCEDURES ON THIS SPECIFIC SUBJECT.

OSHA TABLE C
Common Flammable, Toxic, and Caustic Substances

Class I Liquids

Gasoline
Benzine (Petroleum ether)
Acetone
Hexane
Lacquer
Lacquer thinner
Denatured alcohol
Ethyl alcohol
Xylene (Xylol)
Contact cement (Flammable)
Toluidi (Toluene)
Methyl ethyl ether
Methyl ethyl ketone
Naphtha Y, M, and P

Class II Liquids

Diesel fuel
Motor oil
Kerosene
Cleaning solvents
Mineral spirits
Agitene

Class III Liquids

Paints (oil base)
Linseed oil
Mineral oil
Neatsfoot oil
Sunray conditioner
Guardian fluid

Toxic Substances

Ammonia
Chlorine
Antifreeze
Duplicating Fluid
Methyl alcohol (Wood alcohol or Methanol)
Defoliants
Herbicides
Pesticides
Rodenticides

Caustic Substances

Lye
Muriatic acid
Caustic soda
Sulfuric acid
Tannic acid